

SEQUENCE LISTING

<110> Zheng, Peizhong
Li, Chun Ping
Nichols, Scott E.

<120> Oar Polynucleotides, Polypeptides and
Their Use in PHA Production in Plants

<130> 35718/241887

<150> 60/258,417

<151> 2000-12-27

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215 220 225 230	
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Gly Val Ile Gly Phe Thr Lys Thr Val Ala Arg Glu Tyr Ala Ser Arg	
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 Gly Arg Gly Phe Ser Gly Val Gln Thr His Val Ala Ala Val Glu Gln
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 Ala Val Val Lys Asp Ala Thr Lys Leu Glu Ala Pro Val Val Val Val
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 Thr Gly Ala Ser Arg Gly Ile Gly Lys Ala Thr Ala Leu Ala Leu Gly
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 Lys Ala Gly Cys Lys Val Leu Val Asn Tyr Ala Arg Ser Ser Lys Glu
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 Trp Gln Asp Val Ile Asp Leu Asn Leu Thr Gly Val Phe Leu Cys Thr
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 Gln Ala Ala Thr Lys Val Met Met Lys Lys Arg Lys Gly Lys Ile Ile
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 Asn Ile Ala Ser Val Val Gly Leu Thr Gly Asn Val Gly Gln Ala Asn
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 Tyr Ser Ala Ala Lys Ala Gly Val Ile Gly Phe Thr Lys Thr Val Ala
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 Arg Glu Tyr Ala Ser Arg Asn Ile Asn Val Asn Ala Ile Ala Pro Gly
 245 250 255
 Phe Ile Ala Ser Asp Met Thr Ala Glu Leu Gly Glu Glu Leu Glu Lys
 260 265 270
 Lys Ile Leu Ser Thr Ile Pro Leu Gly Arg Tyr Gly Gln Pro Glu Glu
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tcc aca tcg ctg gcg cgc cgc ggc ctc gtc agc ttc gca ccc gcg ctc 213
 Ser Thr Ser Leu Ala Arg Arg Gly Leu Val Ser Phe Ala Pro Ala Leu
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cgc ccc ggc cct gac cgc agc tct cgc gcc gtc gcc ctc ctc ggt gta 261
 Arg Pro Gly Pro Asp Arg Ser Ser Arg Ala Val Ala Leu Leu Gly Val
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cga act cat gtc acg gct gtt gat caa gcc att gta aaa ggt gat aca 309
 Arg Thr His Val Thr Ala Val Asp Gln Ala Ile Val Lys Gly Asp Thr
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aag ttg gaa ggt cct gtg gtt gtt gtt act ggt gct tcc agg ggg att 357
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 Gly Lys Ala Thr Ala Leu Ala Leu Gly Lys Ala Gly Cys Lys Val Leu
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165

170

175

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gtt att ggg ttc aca aaa aca gtt gct agg gag tat gcc agc aga aat 837
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gct gaa ctt ggt gaa gag tta gag aag aaa att ctg tca act att cct 933
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Ser	Lys 130	Glu	Ala	Asp	Val	Glu	Ser 135	Met	Ile	Lys	Val 140	Ala	Val	Asp	Thr
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Met	Met	Lys 195	Lys	Lys	Lys	Gly	Arg 200	Ile	Ile	Asn	Ile	Ala 205	Ser	Val	Val
Gly	Leu 210	Thr	Gly	Asn	Ala	Gly	Gln 215	Ala	Asn	Tyr	Ala 220	Ala	Ala	Lys	Ala
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t atg gct tcc att gcc gga tcc aac tgc gtc gct ctc cga acc gcc aac 169
  Met Ala Ser Ile Ala Gly Ser Asn Cys Val Ala Leu Arg Thr Ala Asn
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ttc ggc gcc tcc ggt aac cgg aaa atc ggc cag atc cgc caa tgg tct 217
Phe Gly Ala Ser Gly Asn Arg Lys Ile Gly Gln Ile Arg Gln Trp Ser
      20             25             30

ccg att ctc acg aat ctc cgt ccc gtt tcc ggt ctt cgt cac cga tcg 265
Pro Ile Leu Thr Asn Leu Arg Pro Val Ser Gly Leu Arg His Arg Ser
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 290 295 300

agt tac atc act ggg cag gtt ttc acc att gat gga ggt atg gtg atg 1081
 Ser Tyr Ile Thr Gly Gln Val Phe Thr Ile Asp Gly Gly Met Val Met
 305 310 315 320

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 cggatgatagt ttgttcttttg ctgagtttttg ttttaagctag ttttaccctg tgattttatcg 1201
 tagaatatta gttgaaatgc aattcagtc cttttggcac tagctctgaa ttgcttactg 1261
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 Pro Ile Leu Thr Asn Leu Arg Pro Val Ser Gly Leu Arg His Arg Ser
 35 40 45
 Asn Thr Pro Phe Ser Ser Ser Gly Val Arg Ala Gln Val Ala Thr Leu
 50 55 60
 Glu Glu Ala Gly Thr Gly Ala Thr Gln Lys Val Glu Ala Pro Val Ala
 65 70 75 80
 Val Val Thr Gly Ala Ser Arg Gly Ile Gly Lys Ala Ile Ala Leu Ser
 85 90 95
 Leu Gly Lys Ala Gly Cys Lys Val Leu Val Asn Tyr Ala Arg Ser Ser
 100 105 110
 Lys Glu Ala Glu Glu Val Ser Lys Glu Ile Glu Glu Phe Gly Gly Gln
 115 120 125
 Ala Leu Thr Phe Gly Gly Asp Val Ser Asn Glu Ala Asp Val Glu Ser
 130 135 140
 Met Ile Lys Thr Ala Val Asp Ala Trp Gly Thr Val Asp Val Leu Ile
 145 150 155 160
 Asn Asn Ala Gly Ile Thr Arg Asp Gly Leu Leu Met Arg Met Lys Lys
 165 170 175
 Ser Gln Trp Gln Asp Val Ile Asp Leu Asn Leu Thr Gly Val Phe Leu
 180 185 190
 Cys Thr Gln Ala Ala Ala Lys Ile Met Met Lys Lys Lys Lys Gly Arg
 195 200 205
 Ile Val Asn Ile Ala Ser Val Val Gly Leu Val Gly Asn Val Gly Gln
 210 215 220
 Ala Asn Tyr Ser Ala Ala Lys Ala Gly Val Ile Gly Leu Thr Lys Thr
 225 230 235 240
 Val Ala Lys Glu Tyr Ala Ser Arg Asn Ile Thr Val Asn Ala Val Ala
 245 250 255

Pro Gly Phe Ile Ala Ser Asp Met Thr Ala Lys Leu Gly Gln Asp Ile
 260 265 270
 Glu Lys Lys Ile Leu Glu Thr Ile Pro Leu Gly Arg Tyr Gly Gln Pro
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 Arg Thr Lys Gly Pro Gly Arg Ala Arg Lys Val Pro Ser Gln Val Leu
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 Ala Phe Gln Arg Ser Asn Ser Asn Gly Ser Phe Pro Ser Ser Glu Gln
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 Val Thr Gly Ala Ser Arg Gly Ile Gly Arg Ala Ile Ala Leu Ser Leu
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 Gly Lys Ala Pro Cys Lys Val Leu Val Asn Tyr Ala Arg Ser Ser Met
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 Gln Ala Glu Glu Val Ser Asn Leu Ile Glu Ala Phe Gly Gly Gln Ala
 95 100 105
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 Leu Thr Phe Glu Gly Asp Val Ser Asn Glu Ala Asp Val Glu Ser Met
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 Ile Arg Thr Ala Val Asp Ala Trp Gly Thr Val Asp Val Leu Val Asn
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Asn Ala Gly Ile Thr Arg Asp Gly Leu Leu Met Arg Met Lys Lys Ser
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caa tgg cag gaa gtt att gat ctg aat ctc act ggt gtt ttt ctt tgc 531
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 Met Gln Ala Ala Ala Lys Ile Met Thr Met Lys Lys Lys Gly Arg Ile
 175 180 185

atc aat att aca tca gtt att ggt cag gtt ggc aat gtt gga caa gcc 627
 Ile Asn Ile Thr Ser Val Ile Gly Gln Val Gly Asn Val Gly Gln Ala
 190 195 200

aat tat agt gct gca aag gca ggg gta att ggc ctc aca aaa agt gct 675
 Asn Tyr Ser Ala Ala Lys Ala Gly Val Ile Gly Leu Thr Lys Ser Ala
 205 210 215 220

gcc agg gaa tat gct agc aga aac atc act gtt aat gca gta gcc cct 723
 Ala Arg Glu Tyr Ala Ser Arg Asn Ile Thr Val Asn Ala Val Ala Pro
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ggg ttt att gca tct gat atg act gcc aat cta cga cca ggc att gag 771
 Gly Phe Ile Ala Ser Asp Met Thr Ala Asn Leu Arg Pro Gly Ile Glu
 240 245 250

aaa aaa aga ttg gaa tta atc ccc tta gga aga ctt ggc caa cca gaa 819
 Lys Lys Arg Leu Glu Leu Ile Pro Leu Gly Arg Leu Gly Gln Pro Glu
 255 260 265

gaa gtt gct gga ctt gtg gaa ttc ttg gct ctt aat cct gct gcc aat 867
 Glu Val Ala Gly Leu Val Glu Phe Leu Ala Leu Asn Pro Ala Ala Asn
 270 275 280

tac atc act ggg cag gtg ttc acc att gat gga ggt ttg gca atg 912
 Tyr Ile Thr Gly Gln Val Phe Thr Ile Asp Gly Gly Leu Ala Met
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